

**Exhibit 1**

**Master Services Agreement**

**Contract (Long Form)**

This is a Contract between the below named Contractor ("Contractor"), a Delaware Limited Liability Partnership, and Pacific Gas and Electric Company ("PG&E"), a California corporation with its headquarters located at 77 Beale Street, San Francisco, California 94105.

<b>Contractor's Legal Name:</b>	PricewaterhouseCoopers, LLP	<b>PG&amp;E Contract No. 4400011341</b>
<b>Contractor's Address:</b>	300 Madison Avenue New York, NY 10017	<b>This Contract consists of 48 pages.</b>
<b>Project Name:</b>	Consulting services	
<b>Job Location:</b>	San Francisco; various	

**WORK:** Contractor shall, at its own risk and expense, perform the Work described in this Contract and furnish all labor, equipment, and materials necessary to complete the Work as summarized below and as more fully described in Attachment 1, (Scope of Work). This is not an exclusive Contract. This Contract does not guarantee Contractor any Work nor is there any guarantee as to any volume or duration of Work.

Contractor shall perform Management Consulting and related services as described in further detail in the Specific Conditions, General Conditions, and set forth by individual Contract Work Authorizations (CWAs).

**ATTACHMENTS:** Each of the following documents is attached to this Contract and incorporated herein by this reference:

Attachment 1: Specific Conditions , Pages 3-20

Attachment 2: General Conditions, Pages 21-47

Attachment 3: Safety and Background Check Contracting Requirements Page 48

**CONTRACT TERM:** This Contract is effective upon signature by both parties and expires on 12/31/2017.

**COMPLETION:** Contractor shall commence performance hereof when directed to do so by PG&E. Work shall be completed by the completion date of 12/31/2017. Time is of the essence.


**INSURANCE:** Contractor shall maintain insurance in accordance with Section 30.0 of the General Conditions.

**TERMS OF PAYMENT:** In accordance with Section 6.0 of the General Conditions.

**CONSIDERATION:** As full consideration for satisfactory performance of the Work by Contractor, PG&E's total obligation to Contractor shall not exceed the following amount. This amount is inclusive of all taxes incurred in the performance of the Work. Any change to this amount shall only be authorized in writing by a PG&E Contract Change Order, fully executed by both PG&E and Contractor.

**TOTAL:** As outlined in individual Contract Work Authorizations (CWAs)

**THE PARTIES, BY SIGNATURE OF THEIR AUTHORIZED REPRESENTATIVES, HEREBY AGREE TO THE TERMS OF THIS CONTRACT.**

PACIFIC GAS AND ELECTRIC COMPANY		CONTRACTOR: PricewaterhouseCoopers, LLP	
<b>Signature</b>	e-Signed by Richard Cordova on 2017-01-17 19:16:17 GMT	<b>Signature</b>	
<b>Name</b>	Richard Cordova	<b>Name</b>	Dan Bowman
<b>Title</b>	Portfolio Manager, Sourcing Operations	<b>Title</b>	Partner/Principal
<b>Date</b>	January 17, 2017	<b>Date</b>	1/13/2017

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ADMINISTRATION			
<b>PG&amp;E Negotiator</b>	Kim-Son Ziegler	<b>Contractor Representative</b>	Dan Bowman
<b>Phone</b>	415-973-7701	<b>Phone</b>	(978) 590-8328
<b>Email</b>	kim-son.ziegler@pge.com	<b>Email</b>	<a href="mailto:Dan.bowman@us.pwc.com">Dan.bowman@us.pwc.com</a>
<b>Accounting Reference</b>			
<b>PG&amp;E Work Supervisor:</b>	As per individual CWAs	<b>Phone:</b> As per individual CWAs	
<b>INVOICE INSTRUCTIONS:</b> Contractor shall send invoices for each payment when due, showing the Contract number, to:  PACIFIC GAS AND ELECTRIC COMPANY	<b>Send ORIGINAL Invoice to:</b>	PG&E Accounts Payable* PO Box 7760 San Francisco, CA 94120-7760	
	<b>Send COPY of Invoice to:</b>	As per individual CWAs	
	For information regarding invoice status, call PG&E's Paid Help Line at (800) 756-PAID (7243) or go to AP Web Reporting site at <a href="http://www.pge.com/actpay">www.pge.com/actpay</a> .  <b>*Note:</b> Contractors using the XIGN System do not need to mail a copy of the invoice to PG&E.		

INTERNAL PG&E USE ONLY		
<b>Distribution Date</b>		
<b>Distribution of Copies</b>	<input type="checkbox"/> Document Services (Signed Original Copy) Mail Code N5D 245 MARKET ST., SAN FRANCISCO	<input type="checkbox"/> Contractor (Signed Original Copy)
	<input type="checkbox"/> Work Supervisor	<input type="checkbox"/> Manager
	<input type="checkbox"/> Invoice Approver	<input type="checkbox"/> Supervisor
	<input type="checkbox"/> V.P.	<input type="checkbox"/> Sourcing/ Purchasing
	<input type="checkbox"/> Director	<input type="checkbox"/> Law



**Attachment 1  
Specific Conditions  
Consulting Services**

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### ***Section One - Introduction and Purpose***

1.1 These Specific Conditions establish the terms and conditions under which, PricewaterhouseCoopers LLP, a Delaware limited liability partnership, ("Consultant") shall provide Pacific Gas and Electric Company ("PG&E") with Management Consulting Services ("Services") in support of Various PG&E departments. Each assigned Project will follow general steps for completion as described in these Specific Conditions and/or in each Contract Work Authorization ("CWA"). These Specific Conditions and the General Conditions each form part of the Master Services Agreement No 4400011341. If there is a conflict between the terms contained in the General Conditions, the Specific Conditions, and/or a CWA, the following order of precedence shall apply: (i) the CWA, (ii) the Specific Conditions and then, (iii) the General Conditions.

1.2 The Consultant's personnel shall provide these Services on specific assigned projects(s) using applicable Typical Timing milestones as stated in each project's CWA and may include the following:

- Start of Project
- Data collection design complete
- Evaluation design complete
- Data collection begins
- Data collection complete
- Specific data collection issues (e.g., pilot testing, executive interviews)
- Data Analysis complete
- Preliminary results available
- Solutions and ROI developed
- Implementation started
- Implementation complete
- Phases complete
- Reports developed and implemented
- Project turned over date
- Presentation to management

### ***Section Two - Definitions***

The definitions in the General Conditions, Section 1.0, "Definitions," are supplemented with the terms defined below:

2.1. Contract Change Order, defined as a written order, signed by authorized representatives of PG&E and the Consultant detailing changes to the specified work quantities or modifications in the scope of the original Contract Work Authorization.

2.2. Contract Documents, defined as the Contract Work Authorization and the other documents specifically incorporated in the Contract Work Authorization.

2.3. Consultant, defined as the Consultant is the firm responsible for all or any portion of the Project pursuant to a contract directly with PG&E.

2.4. Final Completion Date, defined as the Final Completion Date under this Contract shall be the date upon which (i) the Project has been fully completed (including punch list items) and accepted by PG&E's Work Supervisor, (ii) all systems are functioning satisfactorily, (iii) certificates of completion have been issued for the entire Project and all conditions to final certificate of completion have been satisfied, (iv) the Consultant has satisfactorily completed all of its services required to be completed prior to the Final Completion Date hereunder, (v) all conditions to final payment to the Consultant pursuant to the CWA have been satisfied, and (vi)



all Project Costs, including internal PG&E charges, have been accounted for, and final payments to the Consultant have been approved by PG&E Work Supervisor.

2.5. Return on Investment, or ROI, defined as the expected payoff from the solution as compared to the input of resources (the cost of the consulting project) with the value of the ultimate outcome (the monetary benefits) Example: Expressed as a desired return on investment percentage that compares the annual monetary benefits minus the cost divided by the actual cost and multiplied by 100. A 0 percent ROI indicates a break-even consulting solution. A 50 percent ROI indicates the cost of the consulting project is recaptured and an additional 50% "earnings" is achieved.

2.6. PG&E Relationship Manager, defined as PG&E's employee representing PG&E's interest in connection with this Master Service Agreement.

2.7. PG&E Work Supervisor, defined as PG&E's employee representing PG&E's interest in connection with a CWA. Each CWA issued will describe a project and the Project Manager's duties related to the project and will identify PG&E's Work Supervisor.

2.8. Project, defined as the assignment that will be described in a CWA accompanied by a technical specification, statement of work, and/or requirements document that includes the Project Budget, project contingency reserve, project cost, project schedule and the final project completion date.

2.9. Consultant's Project Manager, defined as the Consultant's manager shall have the meaning set forth in the General Provisions of this Contract.

2.10. Project Schedule, defined as the project timetable is a complete written schedule indicating the sequence and duration of various activities. The Project Schedule shall establish dates by which any information is to be provided or tasks are to be accomplished by Consultant and PG&E. A Sample Project Schedule is attached hereto as Exhibit B2. The Project Schedule shall be revised and updated by Consultant, subject to approval by the PG&E Work Supervisor, as provided in the CWA. The Project Schedule is for the administrative and management convenience of PG&E Work Supervisor, PG&E and Consultant's Project Manager and may not be relied upon by any Consultant in any way to establish any claims whatsoever, including claims for disruption or delay.

2.11. Services under these Specific Conditions are defined as the following Management Consulting Services: Financial, Operations and Strategy, in each case as particularly described in a Contract Work Authorization that references these Specific Conditions. Services include for example:

"Financial" includes services related to Risk and Governance, Sustainability, Finance, and Capital Projects & Infrastructure.

"Operations" includes services related to endeavoring to improve specific functional areas of operations (business process improvement); cost reduction; sourcing raw materials or product or service components (global sourcing, inventory management, and inbound logistics); making products or delivering services; channeling products and services to the marketplace (outbound logistics, distribution, and warehousing activities); interacting with customers and clients (e.g., managing the "customer experience"); interacting with suppliers, contract manufacturers, and outsourcing partners (supplier relationship management); managing operating risk; and aligning business operations with IT infrastructure and enabling technologies.

"Strategy" includes services related to growth strategy, market entry / exit, customer acquisition / retention, pricing, corporate and business unit strategy.





- 2.12. Site, defined as the physical location where the work will be performed.
- 2.13. Subcontractor, defined as a Consultant working under and being paid by the Consultant.

### ***Section Three – General Provisions***

3.1 Consultant represents and warrants that it has suitable and adequate candidate screening and security procedures, and that it has performed background, reference, credit and security checks on all Consultants referred to perform Services for PG&E prior to assigning such Consultant to work for PG&E. Consultant represents and warrants that all Consultants who shall have access to PG&E facilities shall strictly adhere to PG&E's security measures and operating standards.

3.2. Coordination with PG&E. Consultant's performance of its obligations under this Contract will require close coordination with various PG&E departments and Consultants, including without limitation PG&E's law, insurance, telecommunications, sourcing, project services and operations. Coordination of the Project-related activities of these PG&E functions is the responsibility of Consultant hereunder. In the event that any PG&E employee or user group is causing a delay or a deviation from the expected quality or cost of the Project, Consultant shall promptly give notice thereof to the PG&E Work Supervisor and it should be noted in the project status report and shall assist PG&E to resolve the issue on a timely basis.

3.3. The Consultant shall assign Project team members including but not limited to, Consultant's Project Managers and Consultants of various qualifications. The Consultant shall provide these services, at PG&E's discretion, during the design, budgeting, implementation turn over to PG&E management phases of assigned Projects.

3.4. Contract Work Authorization ("CWA"). The Services shall be performed by Consultant only after the execution of a CWA by Consultant and PG&E. The terms and conditions of this Contract shall apply independently to each CWA. The issuance of any CWA shall not commit PG&E to any future services by Consultant.

3.5 PG&E may issue a CWA to Consultant as a direct-award or through a competitive bidding process. PG&E SHALL NOT BE LIABLE FOR ANY COSTS INCURRED BY CONSULTANT IN PREPARATION OF A PROPOSAL OR FOR OTHER "MARKETING" EFFORTS PUT FORTH BY CONSULTANT.

3.6. CWA Term. Services performed under any CWA not completed within the effective term of this Contract shall terminate at the conclusion of the term specified in the CWA and any modifications thereto. This Contract shall govern Consultant's and PG&E's rights and obligations with respect to said CWA to the same extent as if the CWA was completed during the term of this Contract.

3.7. Modification. PG&E and Consultant will address changes to a CWA by issuing a Change Order to the CWA. Unless expressly authorized in the modified CWA, all the terms of the original CWA and any previous CWA modifications shall remain in full force and effect.

3.8. If during the performance of such a task, the task's schedule cannot be met, Consultant shall immediately notify PG&E's Work Supervisor and both Consultant and PG&E shall agree upon a corrective course of action and a new schedule, as appropriate.



3.9. Upon request by PG&E, Consultant shall inform PG&E of the status of all Projects and development activities at PG&E ("Firm Activity Report"), submit current project evaluations ("Project Scorecard"), and meet with PG&E's Relationship Manager to discuss this Master Service Agreement. PG&E shall limit its request to once per calendar quarter.

***Section Four – Statement of Work –Management Consulting Services***

4.1. Consultant shall provide Services for each Project described in a CWA executed by both parties.

4.2. Consultant shall perform the work activities within budget and in a timely, orderly and safe manner. Consultant shall allow necessary time for all PG&E required reviews to meet the Project Schedule and deadlines.

4.3. As soon as possible after the Consultant's receipt of a fully executed CWA, the Consultant shall hold a comprehensive Kickoff meeting that shall be scheduled with PG&E to affirm communications and Project performance criteria. The Kickoff meeting will confirm PG&E's quality standards and project objectives and include the following discussions:

- 4.3.1. Establish the formal communication plan, meetings, conference calls and status reports.
- 4.3.2. Exchange contact information.
- 4.3.3. Review safety and security issues.
- 4.3.4. Review roles and responsibilities.
- 4.3.5. Confirm and review the project scope.
- 4.3.6. Review Project schedule.
- 4.3.7. Discuss required review meetings and deliverables.
- 4.3.8. Review procurement process.
- 4.3.9. Confirm Deliverable Milestones.
- 4.3.10. Review performance and acceptance test criteria.
- 4.3.11. Confirm Completion Date and Project Closure and hand over (transition) Criteria.

4.4. For each Project, PG&E will assign a PG&E Work Supervisor and Consultant will assign a Consultant's Project Manager who shall have overall responsibility for the project for their respective organization for Project execution and lead their respective organizations' teams. PG&E's Work Supervisor and Consultant's Project Manager shall coordinate activities specified in the CWA, and will act as the primary interfaces between PG&E and the Consultant's project team.

4.5. The Consultant's and PG&E's teams shall work effectively together to coordinate all activities, meetings and deliverables for both teams for a seamless integration for each Project. Projects updates will be based on a Green, Yellow, Red scorecard. If the project becomes Yellow or Red then Consultant's Project Manager and PG&E's Work supervisor will meet as soon as practicable to determine a corrective course of action.

4.6. The Consultant shall manage, monitor and coordinate all project activities as applicable, including any Consultants and subcontractors, and coordinate the assigned Project-related activities of PG&E.

4.7. The Consultant is responsible to develop as a Milestone Deliverable a Project Schedule. All activities associated with a Project will be directed by a Project Schedule. The Project Schedule will be constructed based on a mutual agreement between the Consultant and PG&E. A preliminary Project Schedule will be provided upon the Consultant's delivery of a Project





quotation and/or proposal. All Project Schedules will be constructed based on Milestone Deliverables.

4.8. The Consultant shall use its best efforts as commercially acceptable in the industry to provide prompt attention and diligence to all safety and security issues associated with a Project. The Consultant's Project Manager will identify all issues with potential schedule impact as soon as practicable, and communicate issues to PG&E for prompt resolution.

4.9. The Consultant's Project Manager shall provide PG&E with reports detailing the Project(s) progress, including updated schedule, progress of all activities and deliverables, budget, cash flow, safety, reliability, supplier diversity, action items, open items, and potential change orders, any issues and the strategies and resolutions thereof. The CWA shall specify the frequency and content of these reports.

4.10. The Consultant's Project Manager shall supervise and be responsible for all negotiations of contract, including Contract Change Orders, with PG&E.

4.11. The Consultant's Project Manager shall prepare and submit to PG&E's Work Supervisor for review and approval, any necessary revisions and updates of the Project Schedule and Project Budget as soon as practicable. No such revisions or updates shall be effective unless and until approved by PG&E in its sole discretion.

4.12. Consultant's Project Manager shall hold Project update meetings with PG&E's project team and prepare materials related to the agenda and objectives. The CWA shall specify the frequency of update meeting. Update meetings may also be held upon PG&E's request.

4.13. Consultant's Project Manager will manage compliance with PG&E's Supplier Diversity Program and review and submit all documentation necessary to validate adherence to WMDVBE participation goals. The Consultant's Project Manager must be proactive in its efforts to achieve or exceed these goals.

4.14. Consultant's Project Manager will review and approve all Consultant and Consultant requests for payment, including verification of correct labor billing rates, fees, overhead, reimbursable, equipment and material charges, percentage completion and retainage. Bundle all invoices into a monthly progress payment request to be submitted to PG&E for payment. PG&E will process approve invoices for payment to such Consultants and Consultant. The Consulting organization then will submit their bills electronically. All requests for payment should state how funds being paid are to be applied against the approved Project Budget.

4.15. Project Overview. Immediately upon being retained by PG&E, Consultant's Project Manager shall familiarize itself with the Project, and in connection, therewith its services shall include but shall not be limited to the following:

4.15.1. Obtain a thorough and complete understanding as required to successfully complete the Project. Such an understanding may include a detailed knowledge and appreciation of operational processes and serviceability requirements, how these business units are currently organized, including how work assignments are given and how work flows and the strengths and weaknesses of existing systems, processes and facilities.

4.15.2. Identify aspects of the work which have the potential to disrupt any on-going operations as appropriate. Minimize any interference with such on-going operations.

4.15.3. Provide day-to-day project management, and monitoring and coordination among the Consultant, all with the objective of achieving satisfactory and timely completion of the Project. Perform regular observations and inspections of the work for progress, quality and conformance with the Contract Documents, and exercise professional skill and expertise in



order to minimize or avoid defects and deficiencies in the work (provided that Consultant's Project Manager shall not be required routinely to make continuous or exhaustive inspections); immediately report to PG&E in writing, any deviations from the Contract Documents.

4.15.4. Review the progress schedule, and schedule of values prepared by Consultant and consult with PG&E concerning their acceptability.